



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,730	12/21/2006	Artur Grunwald	GKNG 1282 PCT	4609
27256	7590	03/18/2009	EXAMINER	
Dickinson Wright PLLC 38525 Woodward Avenue Suite 2000 Bloomfield Hills, MI 48304			LIGERAKIS, JOHN	
			ART UNIT	PAPER NUMBER
			3655	
			MAIL DATE	DELIVERY MODE
			03/18/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/575,730	Applicant(s) GRUNWALD ET AL.	
	Examiner John V. Ligerakis	Art Unit 3655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 16, 21, 25, 27, 28 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16, 21, 25, 27, 28 and 31-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office action is in response to the amendment received on December 30, 2008. Claims 17-20, 22-24, 26, 29, and 30 have been cancelled. Claims 15, 16, 21, 25, 27, 28, and 31-35 are currently pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 33, line 2, "internal trochoid" lacks a proper antecedent basis.

Claim Rejections - 35 USC § 103

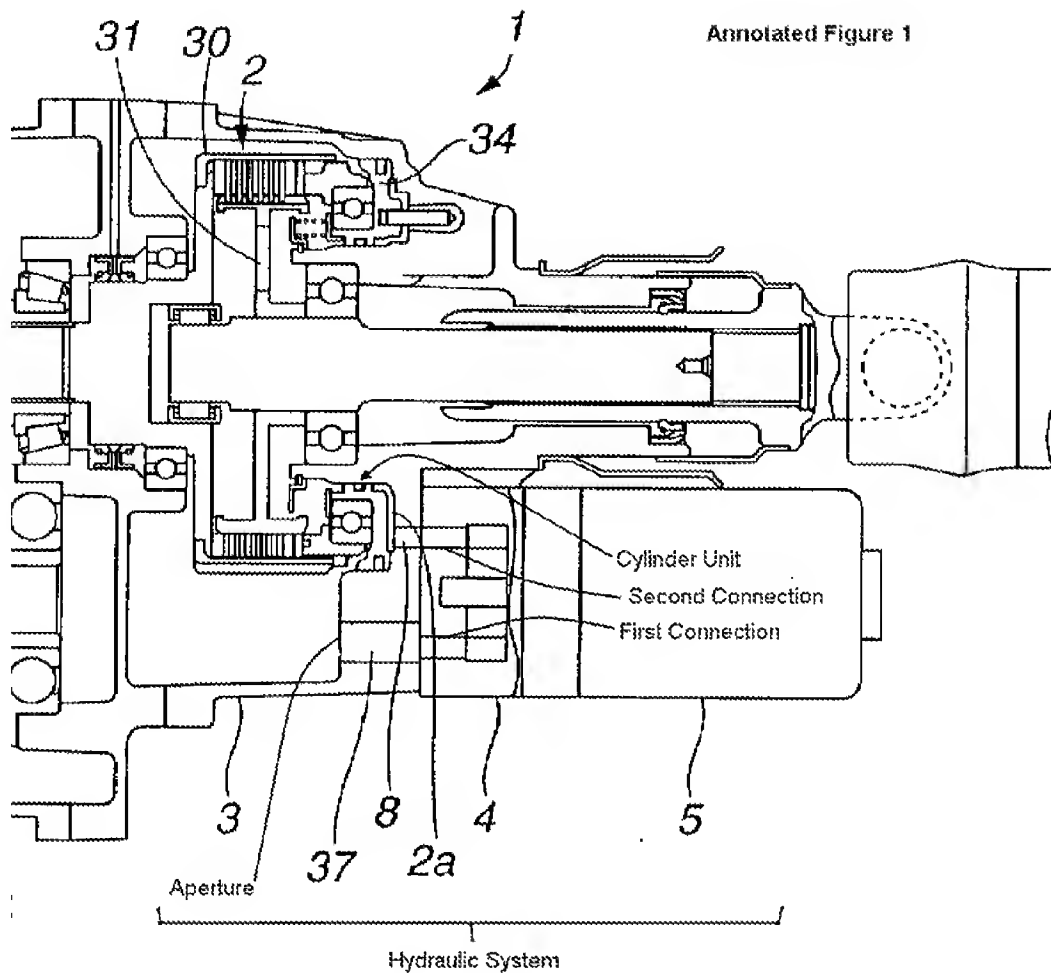
The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 15, 16, 21, 25, 27, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 2003/0230461) in view of Gassmann (US Patent 6,318,532).

Regarding claims 15, 25, and 27, Sakata et al. discloses (See Annotated Figure 1) an axial setting device (1) for actuating a multi-plate coupling (2) in the driveline of a motor vehicle, comprising: a housing (3) in which there are supported two parts (30,31)

Art Unit: 3655

so as to be coaxially rotatable relative to one another, which two parts (30,31) can be coupled to one another by the multi-plate coupling (2) arranged in the housing (3); a cylinder unit with a hydraulic chamber (2a) and a piston (34) which is arranged in the hydraulic chamber (2a) so as to be axially displaceable and which is provided for actuating the multi-plate coupling (2); a hydraulic system for supplying the cylinder unit, comprising a quantity of oil jointly contained in the housing (3) and in the hydraulic chamber (2a), and a pump (4) having a first connection connected to the housing (3) and a second connection connected to the hydraulic chamber (2a), wherein the pump (4) is firmly connected to the housing (3), and in the housing (3), there is provided an aperture connecting the first connection to an interior of the housing (3) and a channel (8) connecting the second connection to the hydraulic chamber (2a); an antechamber (37) in the housing (3) between the aperture and the first connection; the antechamber permits the supply of fluid from the housing to the first connection. Sakata et al. fails to disclose a filter located between the housing and the first connection. Gassmann discloses a hydraulic torque transfer device (See Figure 1) wherein a filter (102) is in an aperture in the hydraulic system (26) between the housing (12) and the first connection (104) of the pump (24). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the aperture in the hydraulic system disclosed by Sakata et al. with a filter in view of Gassmann in order to improve oil filtration.



Regarding claim 16, Sakata et al. discloses an axial setting device wherein the pump (4) is adapted to convey oil from the housing (3) to the hydraulic chamber (2a) and vice versa.

Regarding claim 21, Sakata et al. discloses an axial setting device as set forth above, wherein the channel (8) is provided in the housing (3) only.

Regarding Claim 34, Sakata et al. discloses an axial setting device as set forth above, wherein the pump (4) can be driven by an electric motor (5) and is controllable (See Fig. 1) by an electronic control unit (7).

Regarding claim 35, Sakata et al. discloses an axial setting device as set forth above, wherein the pump (4) and the electric motor (5) form one unit and are positioned on a common longitudinal axis.

Claims 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 2003/0230461) in view of Gassmann (US Patent 6,318,532) and Suzuki et al. (US 2002/01627722).

Sakata et al. and Gassmann discloses an axial setting device as set forth above, but fail to disclose a pressure sensor and controllable check valve. Suzuki et al. (See Fig. 2) discloses a pressure sensor (38) between the connection (P1) and the hydraulic chamber (26d), the pressure sensor (38) being connected to an electronic control unit (9); and a controllable check valve (37) between the connection (P1) and the hydraulic chamber (26d). It would have been obvious to one of ordinary skill at the time of the invention to provide Sakata et al. with a pressure sensor and controllable check valve between the second connection and the hydraulic chamber of the axial setting device in view of Suzuki et al. to improve pressure control.

Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakata et al. (US 2003/0230461) in view of Gassmann (US Patent 6,318,532) and Bachmann et al. (US 2003/0072665).

Sakata et al. and Gassmann disclose the axial setting device with a pump as set forth above, but fail to disclose an internal gear pump comprised of a hollow gear with an internal trochoid, a rotor with an external trochoid, and rotatable gears. Bachmann et al. discloses a toothed device for a pump, wherein the pump is an internal gear pump

Art Unit: 3655

(See Fig. 1) and comprises a hollow gear (0.2) with an internal trochoid (inner portion of 0.2) and a rotor (0.5) with an external trochoid (0.6), wherein the internal trochoid (0.3) of the hollow gear (0.2) is formed by a plurality of rotatable gears (0.4) being inserted in partially cylindrical recesses (0.3) of the hollow gear and the rotor (0.5), along its external trochoid (0.6), comprises a toothed structure which engages the teeth of the rotatable gears (0.4). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sakata et al. such that the pump is a trochoid type gear structure in view of Bachmann et al. to improve efficiency.

Response to Arguments

Applicant's arguments filed on December 3, 2008, have been fully considered, but they are not persuasive. Applicant contends (see page 6, lines 14-15 and 18-19; page 7, lines 4-5; page 9, lines 3-6; and page 11, lines 10-11) Sakata et al. does not teach or suggest a suction passage in communication with the filter. Examiner admits that Sakata et al. does not disclose a filter, however, the Examiner's rejection is based on a combination of the Sakata et al. and Gassmann references. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Further, applicant contends, see page 9, lines 13-16, that Gassmann does not teach or suggest a filter located between the housing and the first connection of the

Art Unit: 3655

pump. However, the filter disclosed by Gassmann is located between the housing (12) and the first connection (104) of the pump (24) (See Fig. 1).

Regarding the applicant's argument, see page 9, lines 16-18, that Gassmann does not teach or suggest that the oil strainer may be connected to the pump or to the pump housing. Gassmann does teach that the oil strainer is connected to the pump housing (See Figure 1).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Ligerakis whose telephone number is (571) 270-3278. The examiner can normally be reached on M-Th 8am-5:30pm.

Art Unit: 3655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571)272-7095. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9179 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

/John V Ligerakis/

Examiner, Art Unit 3655

/CHARLES A. MARMOR/

Supervisory Patent Examiner, Art Unit 3655